

FM 403[®]

Version 0.1

Revision Date 06/22/2015

Print Date 08/10/2016

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : FM 403[®]

Substance number : REL_4275

Chemical usage : Cleaning Compound

Manufacturer or supplier's details

Company : Chemetall US, Inc.

Address : 675 Central Avenue
New Providence NJ 07974

Telephone : (800) 526-4473

Telefax : (908) 464-4658

Emergency telephone no : CHEMTREC - 800-424-9300, 1-703-527-3887 (International)

SECTION 2. HAZARDS IDENTIFICATION**Emergency Overview**

Appearance	liquid
Colour	light yellow
Odour	like soap
Hazard Summary	Causes irritation of eyes Harmful if swallowed.

GHS Classification

Eye irritation : Category 2A

GHS Label element

Hazard pictograms :



Signal word : Warning

Hazard statements : Causes serious eye irritation.

Precautionary statements : **Prevention:**
Wash skin thoroughly after handling.
Wear eye protection/ face protection.

Response:
IF IN EYES: Rinse cautiously with water for several minutes.
Remove contact lenses, if present and easy to do. Continue

FM 403[®]

Version 0.1

Revision Date 06/22/2015

Print Date 08/10/2016

rinsing.

If eye irritation persists: Get medical advice/ attention.

Potential Health Effects

Inhalation	: no
Skin	: no
Ingestion	: yes
Aggravated Medical Condition	: None known.

Carcinogenicity:**IARC**

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

OSHA

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

NTP

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture :

Hazardous components

Component	CAS-No.	Weight percent
Sodium tetraborate pentahydrate	12179-04-3	1 - 5
Aluminum nitrate	13473-90-0	1 - 5
Potassium hydroxide	1310-58-3	0.1 - 1

Unidentified ingredients are considered not hazardous under Federal Hazard Communication Standard (29CFR 1910.1200).

Specific chemical identity of composition has been withheld as a trade secret.

Exact percentage of composition has been withheld as a trade secret.

SECTION 4. FIRST AID MEASURES

If inhaled : Remove person to fresh air. If signs/symptoms continue, get medical attention.

FM 403[®]

Version 0.1

Revision Date 06/22/2015

Print Date 08/10/2016

- In case of skin contact : Wash off immediately with plenty of water for at least 15 minutes.
If skin irritation persists, call a physician.
- In case of eye contact : Rinse immediately with plenty of water for at least 15 minutes.
Keep eye wide open while rinsing.
Seek medical advice.
- If swallowed : Rinse mouth.
Drink 1 or 2 glasses of water.
Never give anything by mouth to an unconscious person.
Obtain medical attention.

SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Water spray
Dry powder
Foam
Carbon dioxide (CO₂)
- Further information : Use water spray to cool unopened containers.
- Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.

SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Ensure adequate ventilation.
- Methods and materials for containment and cleaning up : Ventilate area.
Clean up with inert absorbant material.
Keep in suitable, closed containers for disposal.
Flush with plenty of water.
- Additional advice : Never return spills in original containers for re-use.

SECTION 7. HANDLING AND STORAGE

- Advice on safe handling : Use only with adequate ventilation.
- Conditions for safe storage : KEEP FROM FREEZING
Store indoors in a cool, well-ventilated place
Keep containers dry and tightly closed to avoid moisture absorption and contamination.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Components with workplace control parameters**

FM 403[®]

Version 0.1

Revision Date 06/22/2015

Print Date 08/10/2016

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Sodium tetraborate pentahydrate	12179-04-3	TWA	1.000000 mg/m3	NIOSH REL
		TWA	10.000000 mg/m3	OSHA P0
		TWA (Inhalable fraction)	2.000000 mg/m3	ACGIH
		STEL (Inhalable fraction)	6.000000 mg/m3	ACGIH
Aluminum nitrate	13473-90-0	TWA	2.000000 mg/m3	OSHA P0

Personal protective equipment

- Respiratory protection : If the occupational exposure limits cannot be met, suitable respirator equipment shall be worn.
- Hand protection
Remarks : Impervious gloves
- Eye protection : Safety glasses with side-shields
- Skin and body protection : Rubber or plastic apron
- Hygiene measures : Avoid contact with skin, eyes and clothing.
Wear suitable gloves and eye/face protection.
Wear suitable protective clothing.
Wash hands before breaks and immediately after handling the product.
Provide adequate ventilation.
Do not inhale fumes.
Keep away from food and drink.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance : liquid
- Colour : light yellow
- Odour : like soap
- pH : 9.0 - 10.0
- Freezing point : > 0 °C
- Boiling point/boiling range : no data available
- Flash point :
does not flash
- Evaporation rate : 1
Water = 1
- Upper explosion limit : Not applicable.

FM 403[®]

Version 0.1

Revision Date 06/22/2015

Print Date 08/10/2016

Lower explosion limit	: Not applicable.
Vapour pressure	: no data available
Relative density	: 1.020
Bulk density	: 8.51 lb/gal
Solubility(ies)	
Water solubility	: Appreciable
Partition coefficient: n-octanol/water	: no data available
Auto-ignition temperature	: No data available
Thermal decomposition	: No data available
Viscosity, dynamic	: No data available

SECTION 10. STABILITY AND REACTIVITY

Conditions to avoid	: freezing
Incompatible materials	: Acids
Hazardous decomposition products	: Nitrogen oxides (NOx) Carbon oxides Oxides of phosphorus

SECTION 11. TOXICOLOGICAL INFORMATION**Acute toxicity****Product:**

Acute oral toxicity : Acute toxicity estimate : > 5,000.000000 mg/kg
Method: Calculation method

Components:**Sodium tetraborate pentahydrate:**

Acute oral toxicity : LD50 rat: 2,660.000000 mg/kg
LD50 rat: 3,305.000000 mg/kg

Acute inhalation toxicity : LC50 rat: > 2.000000 mg/l
Test atmosphere: dust/mist

Acute dermal toxicity : LD50 rabbit: > 2,000.000000 mg/kg

Aluminum nitrate:

FM 403[®]

Version 0.1

Revision Date 06/22/2015

Print Date 08/10/2016

Acute oral toxicity : LD50 mouse: 370.000000 mg/kg

LD50 rat: 204.000000 mg/kg

Potassium hydroxide:

Acute oral toxicity : LD50 rat: 273.000000 mg/kg

LD50 rat: 365.000000 mg/kg

Acute dermal toxicity : LD50 rabbit: 1,260.000000 mg/kg

Skin corrosion/irritation**Components:****Potassium hydroxide:**

Result: Corrosive

Serious eye damage/eye irritation**Product:**

Result: Eye irritation

Components:**Sodium tetraborate pentahydrate:**

Result: Eye irritation

Potassium hydroxide:

Result: Corrosive

Respiratory or skin sensitisation

no data available

Germ cell mutagenicity

no data available

Carcinogenicity

no data available

Reproductive toxicity

no data available

STOT - single exposure

no data available

STOT - repeated exposure

no data available

Aspiration toxicity

no data available

FM 403[®]

Version 0.1

Revision Date 06/22/2015

Print Date 08/10/2016

SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity**

no data available

Bioaccumulative potential**Product:**
 Partition coefficient: n-
 octanol/water : Remarks: no data available
Other adverse effects**SECTION 13. DISPOSAL CONSIDERATIONS****Disposal methods**

Waste from residues : Refer to all federal, provincial, state and local regulation prior to disposition of container and unused contents by reuse, recycle or disposal.

SECTION 14. TRANSPORT INFORMATION**International regulation****Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable for product as supplied.

National Regulations**SECTION 15. REGULATORY INFORMATION**
TSCA Status : All components of this material comply with US TSCA requirements.

OSHA Hazards : Moderate eye irritant, Toxic by ingestion

WHMIS Classification : D2B: Toxic Material Causing Other Toxic Effects
EPCRA - Emergency Planning and Community Right-to-Know Act

Potassium hydroxide	1310-58-3	1,000	
---------------------	-----------	-------	--

SARA 311/312 Hazards : Acute Health Hazard

SARA 302 : SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

FM 403[®]

Version 0.1

Revision Date 06/22/2015

Print Date 08/10/2016

SARA 313 : SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

US State Regulations**Massachusetts Right To Know**

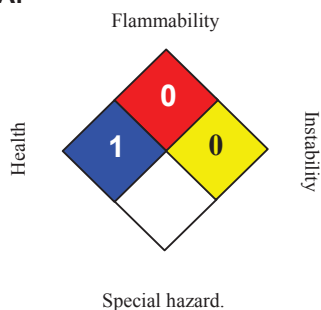
Trade Secret Registry	735517-5156P
Sodium tetraborate pentahydrate	12179-04-3

Pennsylvania Right To Know

water	7732-18-5
Sodium Bicarbonate	144-55-8
Trade Secret Registry	735517-5003P
Trade secret registry	735517-5137P
Trade Secret Registry	735517-5156P
Aluminum nitrate	13473-90-0
Potassium hydroxide	1310-58-3
Zinc oxide	1314-13-2

New Jersey Right To Know

water	7732-18-5
Sodium Bicarbonate	144-55-8
Trade Secret Registry	735517-5003P
Trade secret registry	735517-5137P
Trade Secret Registry	735517-5156P
Sodium tetraborate pentahydrate	12179-04-3
Aluminum nitrate	13473-90-0

NFPA:**HMIS III:**

HEALTH	1
FLAMMABILITY	0
PHYSICAL HAZARD	0

0 = not significant, 1 = Slight,
 2 = Moderate, 3 = High
 4 = Extreme, * = Chronic

Safety Glasses, Gloves, Apron

SECTION 16. OTHER INFORMATION

FM 403[®]

Version 0.1

Revision Date 06/22/2015

Print Date 08/10/2016

Further information

Version 1.0

Revision Date 06/22/2015

Chemetall US, Inc. warrants that the products described herein will conform with its published specifications.

The products supplied by Chemetall and information related to them are intended for use by buyers having necessary industrial skill and knowledge. Buyers should undertake sufficient verification and testing to determine the suitability of the Chemetall materials for their own particular purpose. Since buyer's conditions of use of products are beyond Chemetall's control, Chemetall does not warrant any recommendations and information for the use of such products. CHEMETALL DISCLAIMS ALL OTHER WARRANTIES INCLUDING THE IMPLIED WARRANTY OF MERCHANTABILITY AND FITNESS FOR ANY PARTICULAR PURPOSE IN CONNECTION WITH THE USE OF ITS PRODUCTS.